Release to Pivot

Originating Office → 2 → Pivot Office → 3 → Donor/ Query/ Release Office

4 ← (between Donor/Query/Release Office and Pivot Office)

1 ↑ (between Originating Office and Originating End User)

5 (from Pivot Office to Recipient Office)

Recipient Office → 6 → Ported End User

Originating End User

Ported End User
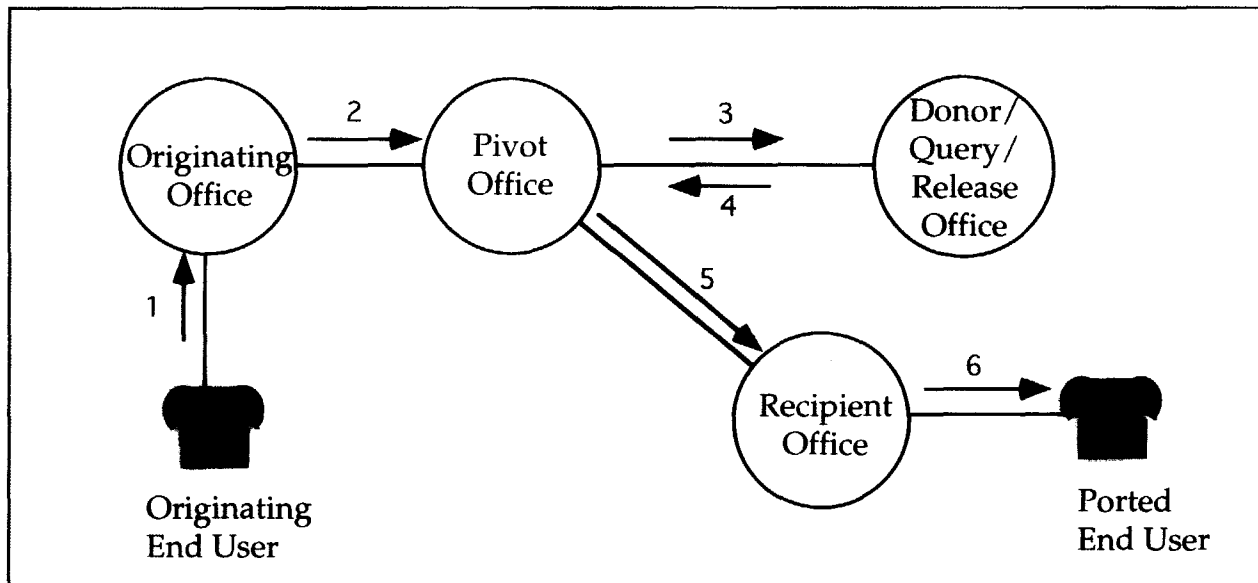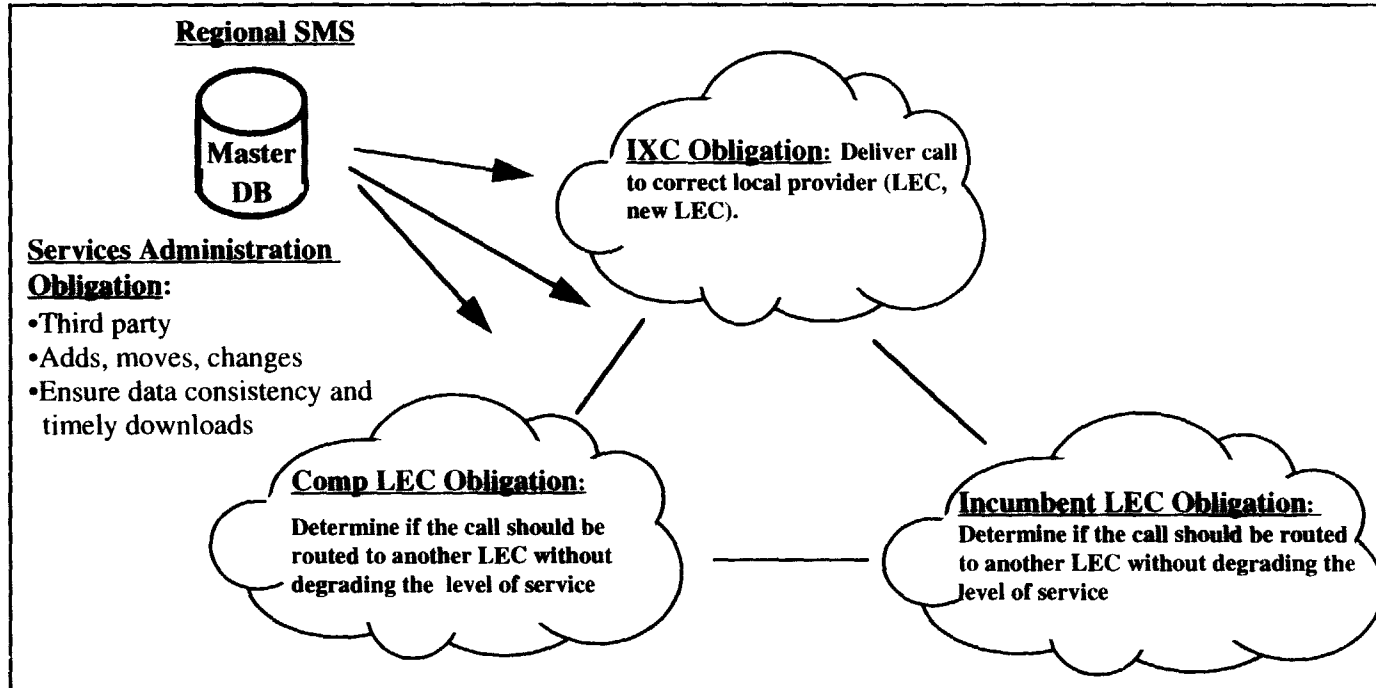
- Database may be internal to the donor office

- Donor office/LNP database keeps track of where ported number currently resides, sends back routing number in the ISUP message

- Trunks between pivot and donor offices released

- Requires full SS7 network deployment

Wireless (CMRS)

- **Wireless operator participation is not included in the initial trials in any state**

- **NPRM comments from many wireless operators indicate a growing interest in number portability**

- **Issues preventing wireless operator participation**
  - standards for data base queries, roaming, interconnection, etc...
  - no current consensus among wireless operators on LNP interest

- **Expectation that wireless participation will happen**
  - FCC Wireless Bureau investigating whether to treat wireless operators more like wireline operators

> *A national forum is needed to address LNP technical requirements for wireless networks*

LNP Services Administration

Regional SMS

Master DB

Services Administration Obligation:
• Third party
• Adds, moves, changes
• Ensure data consistency and timely downloads

IXC Obligation: Deliver call to correct local provider (LEC, new LEC).

Comp LEC Obligation:
Determine if the call should be routed to another LEC without degrading the level of service

Incumbent LEC Obligation:
Determine if the call should be routed to another LEC without degrading the level of service

Issues

- LECs currently administer the Numbering Plan in their regions
  - The FCC recently issued an order to consolidate this function within a new North American Numbering Advisory Committee
- All other parties generally agree that some independent third party must provide number administration once LNP implemented
- LNP number administration scope currently limited to regional implementation

Location (Geographic) Number Portability

- **Initial industry consensus is to only allow number portability within a rate center**
  - minimizes billing impacts on consumers who call ported numbers

- **General requirements to broaden geographic scope**
  - additional AMA recording and billing records processing
  - consumer acceptance of "caller pays" impacts on calls to a number which has moved to a different rate center

- **Longer term industry questions**
  - changes in billing paradigms and tariff structures
  - blurring of separation between local and toll
  - relationship to 500 service and wireless mobility

Need agreement on an LNP architecture which can evolve to meet future location LNP requirements

LNP Number Administration

- **Each state is issuing its own RFP for NPAC/SMS**

  - differences in processes and technical requirements will result in higher overall industry costs

- **Nortel is bidding in Illinois, in partnership with another company who will be the prime vendor and administrator**

  - the solution in our bid will have a national perspective

LNP Recommendations to the FCC

- **Utilize the Illinois LNP Task Force specs as a base to establish a common, national basis for LNP**
  - key to ensuring minimum industry costs and time to deploy

- **Allow options to meet specific local needs**
  - query reduction mechanisms to allow cost containment

- **Industry forums to agree on national, technical solutions for LNP**
  - service provider number portability
  - location (geographic) number portability
  - wireless